

ESTABLISHED IN 1861 THE AMERICAN BEE JOURNAL OLDEST BEE PAPER IN AMERICA

GEORGE W. YORK, Editor, DEVOTED EXCLUSIVELY TO BEE-CULTURE. Weekly, \$1.00 a Year. Sample Free.

VOL. XXX. CHICAGO, ILL., NOVEMBER 24, 1892. NO. 22.



"Some Murmur when their sky is clear,
And wholly bright to view,
If one small speck of dark appear
In their great heaven of blue;
And some with thankful love are filled,
If but one streak of light,
One ray of God's good mercy, gild
The darkness of their night."

Mr. G. K. Hubbard, of Fort Wayne, Ind., is visiting in Southern California this fall. Mrs. H. accompanies her husband, and doubtless they are having a delightful time. Mr. Hubbard is well known as a wide-awake dealer in bee-keepers' supplies. Perhaps he will write an account of his California trip for the benefit of our readers.

The Adulteration of Honey is a subject of such tremendous importance—involving the very existence of the pursuit of bee-keeping—that the best minds of the bee-fraternity must be brought to bear upon it, by way of a discussion of the best means to employ in order to accomplish the desired end—the annihilation of the criminals who defraud the public by imposing upon them adulterated honey for the pure. Last week Prof. Cook opened the sub-

ject anew, and this week the former editor of the BEE JOURNAL, Thomas G. Newman, on page 697, continues the discussion in his usual vigorous manner.

That something must be done, and that right speedily, is quite evident to all who are in the least interested in the industry of bee-culture. The great questions are—"What shall be done?" and "How shall we proceed to accomplish it?" The final decisions must be almost unanimous, if we expect to accomplish anything of value. The undertaking will be a large one, but victory will be the inevitable result of the efforts of bee-keepers, if they move upon the common enemy in solid phalanx, and with a determination begotten of the righteousness of their cause.

Let all who have valuable suggestions to offer, please do so now, so that at the coming winter bee-conventions some definite action may be taken, that shall result in the final overthrow of the nefarious adulterators, and the placing again of honest honey upon our markets.

The Ladies' Home Journal, of Philadelphia, Pa., is perhaps the finest monthly home magazine in the world. If ordered before Dec. 20th, 1892, we can club it with the BEE JOURNAL—both Journals for one year—for \$1.60, to either old or new subscribers. If you are a new subscriber to both JOURNALS, you will receive ours the rest of this year free; and the "Ladies' Home Journal" will begin with the January number.

Future of Bee-Keeping.—

Mr. C. H. Dibbern, the very practical and helpful apiarian department editor of the *Western Plowman*, comments so sensibly upon the past few poor seasons in bee-keeping, and also looks so hopefully toward its future, that we feel that every bee-keeper in the land should have an opportunity to read what he has to say.

This is a subject that interests every honey-producer, hence we call particular attention to the following paragraphs, written by Mr. D., who has had 25 years' experience in the business, has been through all its "ups and downs," and now says that he knows of "no other industry that offers so many opportunities to a poor man as bee-keeping to get a start in life." Here is what he says on the subject:

What about the future of bee-keeping? It is true the last few years have been rather poor over a part of our country, and no doubt many have become discouraged, and turned to something else. There has been plenty of hard work, and great fortunes have not been made, and yet the future is bright with promise. The seasons certainly will not always fail, and the "good old years" will surely come again, when "the fields will laugh with a harvest."

The bee-keepers who have studied the various problems of the business, have learned much during the last few years that will be turned to some account hereafter. In our locality there is no reason why the seasons should not be as good as they used to be. In fact, there are many reasons why they should be better. More land is being used for pasturage year after year, giving the white clover a chance. Alsike clover is also being cultivated to some extent, and sweet clover has "come to stay" in all the out-of-the-way nooks and corners. More basswood and honey-locusts are growing up than are being cut down, and yet the last few seasons have been poor for some cause. Climatic causes have had more to do with these failures than any other one thing.

We believe it was the late M. Quinby who said: "Get the bees, and at some time every year they will furnish the honey." That has not proved true in late years. For several years we had hives overflowing with bees all summer,

only to be obliged to feed them up in the fall for winter. But all this will be changed again. Those who stick to the business through thick and thin are the ones who will succeed.

Just now some are anxious to get out of the business; others are going to California and other favored climes, and are offering their bees at ridiculously low figures. This will be a good chance for some one to get a start, and no doubt some one will take advantage of it. After more than 25 years' experience we know of no other industry that offers so many opportunities to a poor man as bee-keeping to get a start in life.

The World's Fair Women

"Souvenir" is the daintiest and prettiest book issued in connection with the World's Fair. It is by Josephine D. Hill—a noted society lady of the West—and contains superb full-page portraits and sketches of 31 of the World's Fair women and wives of prominent officials connected with the great Fair. It is printed on enameled paper, with half-tone engravings, and is bound in cloth, and also in black, red, white or blue leatherette, gold lettered. Just the thing for a Christmas gift to your friend. We will send it postpaid for \$1.00, or give it for two new subscribers to the BEE JOURNAL for a year, at \$1.00 each. Every woman will want a copy of this book, we feel sure.

Bees in a Conservatory.—

Carrie B. Aaron, of Philadelphia, Pa., writes us a very interesting report of her experience with bees the past season. At the end of her letter she asks a few questions, which show that she proposes carrying on some profitable experiments during the coming winter. Her letter is as follows:

On the 9th of last June I commenced bee-keeping on a small scale with one hive of Italian bees, desiring to begin at the bottom and gradually, but rapidly, acquire that knowledge which will come to all who devote the greater part of a summer to the close study of the habits of bees. The success which followed has been more than anticipated, as

there are now three strong colonies well supplied with winter stores.

Although my bees are situated in the heart of the city, on a third-story balcony, far removed from any pasture, the original colony yielded about 50 pounds of white comb honey of delicate flavor.

One of my queens was reared by Doolittle's plan, and although it is a method which requires a combination of patience, nerve and faith in a novice, where the space for manipulation is extremely limited, it is certainly one which will insure the best queens, and I look forward with keen pleasure to the coming summer for increased knowledge and space wherein to practice queen-rearing.

For this winter's experiments my balcony has been partly enclosed in glass with arrangements for heating. One colony is to continue active all winter, for purposes of study, relative to food preferred by the bees. If any of the BEE JOURNAL correspondents have had experience in studying bees during the winter in a glass enclosure, I would appreciate any information given in regard to management.

The AMERICAN BEE JOURNAL comes to me each week, and is always read with much interest, and referred to frequently. Answers to the following questions will be thankfully received:

1. What winter flowering plants could be placed in my conservatory, which would be most attractive to the bees?

2. Would the limited facilities for flight have a bad effect upon the bees, if light, heat, food and ventilation were properly arranged?

3. Would regular feeding result in the production of drones? and, if so, could fertilization take place within the conservatory?

4. Do flowers in a green-house, under artificial heat, yield the same amount of nectar that they would under natural circumstances? CARRIE B. AARON.

Philadelphia, Pa.

The foregoing questions were referred to Prof. A. J. Cook, of Agricultural College, Mich., who has kindly replied to them as follows:

The investigations which Mrs. or Miss Aaron proposes to carry forward are certainly very interesting, and we may wish her all success.

1. There are many flowers of our conservatories that furnish nectar, notably poinsettia, which secretes nectar so

abundantly that we have been able to collect enough for analysis; and mignonette. There must be many others, as Mr. Root found a conservatory in New York city, where bees were kept all winter, specially to work on the flowers, and so increase seed production. I would suggest that the questioner correspond with Mr. A. I. Root, of Medina, Ohio, and learn just where the conservatory is; and as she is so near, she could easily visit it.

2. I should not expect bees to prosper in a green-house, but as "nothing succeeds like success," if it has succeeded in New York city, it will doubtless succeed in Philadelphia.

3. If the colony prospered sufficiently, no doubt drones would be produced, but there is much doubt if such would be the case. From quite extensive experimentation, trying to mate bees in our conservatory, I question if it can ever be made a success. The drones seem alarmed, and pay no possible heed to the queens. I do not believe mating bees in confinement can ever be made a success.

4. That flowers in a conservatory do secrete abundant nectar, is proved by the poinsettia already referred to. The experiments performed by Prof. L. H. Bailey, of Cornell University, give added support to this view. It is probable that even artificial light would result in producing nectar, as well as in vigor of growth. Bee-keepers will watch the results of this experiment with no small interest.

A. J. COOK.

"Bees and Honey"—page 685.

Another Hive has been patented, this time by Mr. John Conser, of Missouri, dated Sept. 27, 1892. After describing the improvements, the claims of Mr. Conser are set forth as follows:

1. The combination of a hatching-box provided with compartments adapted for the reception of brood-frames, hives arranged adjacent to the hatching-box, and having brood-frames adapted to be placed into the compartments of the hatching-box, and conductors connecting the hives with the compartments of the hatching-box, and provided with queen-excluders, substantially as and for the purpose described.

2. The combination of a hatching-box provided with an opening, a hive arranged adjacent to the hatching-box,

and provided with an opening, and a queen-excluder connecting the box and the hive, and composed of two blocks secured together, and having their opposed faces provided with recesses, a perforated plate interposed between the blocks, and tubular conductors extending from outer faces of the block and adapted to fit in the openings of the hatching-box and the hive, substantially as described.

3. A bee-escape comprising a board provided with a central opening, and having recesses arranged at the sides of the opening, an upper plate secured to the board and arranged over the central opening, and provided with openings, a lower plate secured to the board and arranged below the central opening, and the series of angle-pieces interposed between the plates and arranged in the form of a star, and forming contracted bee-openings, substantially as and for the purpose described.

Some Very Kind Words have been said editorially in all the bee-periodicals regarding the recent improvements in the general appearance of the *AMERICAN BEE JOURNAL*. We have appreciated all such references very much indeed. The following is the latest, and comes from the November number of the *American Bee-Keeper*:

The *AMERICAN BEE JOURNAL* certainly shows an instillation of young blood in its editorial department and general make-up. It now appears with an engraved title page, which adds very much to its general appearance. The different departments also have new engraved headings. Friend York's face appears at the head of the editorial column in a "Globe" veil, and the column is entitled "Editorial Buzzings." We suppose the illustration goes to show that the editor is impervious to what his contemporaries may say of him, good, bad, or indifferent. We hope, however, he will hear only good of himself.

The "supposition" in the latter part of the paragraph is quite true. So long as we live our motto—"Do right and fear no one"—we shall not worry about what others may say of us. We expect to stick to that motto through life, and can only trust that we may be so fortunate as to enjoy the "hope" so kindly expressed in the last sentence above.

Sweetening the Neighbors

by giving them honey is beautifully commented on by Mr. John F. Gates, in the *Canadian Bee Journal*. He says it is a most excellent way to keep on good terms with them, and appropriately calls it a "peace recipe," the bee-keeper furnishing the honey which the "recipe" requires.

He mentioned the fact of his neighbors shedding tears, when, having sold his farm, he removed to another part of the country. Among other things that were suggested, came the inquiry, "Who will give us honey when Mr. Gates is gone away?" He says: "The thought never occurred to them that my bees sometimes were too inquisitive in their affairs, and not infrequently in a pointed and painful way. But giving your neighbors honey is but a small part of this recipe for peace; in fact, it merely opens the way, and is only incidentally connected with the greater and higher aim which all should have in view in bringing others to feel and realize what kind of life we should live."

It pays to be neighborly, and nothing will so win the good-will and insure the kindly interest of neighbors, like catering to the "sweet tooth" which each one of them possesses. Nothing is ever lost in so doing, while often very much is gained.

A Honey-Day Edition of the

Longmont, Colo., *Times* was issued after the late meeting of the Colorado State Bee-Keepers' Honey-Day meeting, held at that place. This shows enterprise, and a great interest in the pursuit. It contained the portraits of seven prominent local bee-keepers, and four apiaries. All told, there are eight pages 11x15 inches in size, devoted to "Apiculture." On another page of this issue of the *BEE JOURNAL*, we publish an article about bee-keeping in Colorado, written by Mr. H. Knight, the efficient Secretary of the association. We hope to be able to publish other essays read there.

The Current of Life.

Don't look for flaws as you go through life,
And even when you find them
It is wise and kind to be somewhat blind
And look for the virtues behind them;
For the cloudiest night has a hint of light
Somewhere in its shadow bidding;
It is better by far to hunt for a star
Than the spots on the sun abiding.

The current of life runs ever away
To the bosom of God's great ocean,
Don't set your force 'gainst the river's course
And don't think to alter its motion.
Don't waste a curse on the universe—
Remember it lived before you;
Don't butt at the storm with your puny form—
But bend and let it pass o'er you.

The world will never adjust itself
To suit your whim to the letter,
Some things must go wrong your whole life
long.

And the sooner you know it the better.
It is folly to fight with the Infinite,
And go under at last in the wrestle;
The wiser man shapes into God's plan
As the water shapes into the vessel.

—Selected.



Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Not Lost Confidence in Bee-Culture.

I did not have one swarm from 50 colonies this year, nor did I get a pound of honey, but I had to feed 600 pounds of sugar for stores. Still I have not lost confidence yet. I intend to make bee-keeping a specialty.

CHAUNCEY REYNOLDS.

Fremont, Ohio, Nov. 11, 1892.

Wintered on Honey-Dew, Etc.

I wintered my bees on honey-dew last winter, and reported in the BEE JOURNAL that they were dying very fast, so much so that I became alarmed, and took them out of the cellar the first warm day in February. They had a lively time, and as the weather continued warm, and they could fly every few days, the honey-dew seemed to do

no further damage. I lost but one colony in the cellar, but lost 3 more by spring dwindling, and at the beginning of the white clover harvest I broke up 2 more to strengthen the balance, so that I had 22 colonies to begin the harvest with. I have stored 2,000 pounds of extracted honey. I have now 29 colonies in good condition to go into winter quarters.

FRED BECHLY.

Searsboro, Iowa, Nov. 12, 1892.

He Likes Yellow Bees.

I have 22 colonies of bees. My increase is due to the queens I bought from a Texas queen-breeder. But, on the other hand, two good swarms left me, and one of them had a yellow queen. My experience with bees is, the better the bee the better the result, and the yellower the queen the better it suits me.

J. L. BOWDISH.

Oxford, Kans., Nov. 11, 1892.

Hybrids and Blacks Did the Best.

I had 6 colonies of bees, spring count, and got 200 pounds of comb honey and 180 pounds of extracted honey. That is more than bee-keepers secured around me this year, that had the same number of colonies, Good for the hybrid bees and blacks. They are the bees for this country. I tried a colony of Italian bees, but they did not do well in gathering honey. My hybrids beat them "all hollow."

FRED L. NUTTING.

North Dexter, Maine, Oct. 30, 1892.

Death of a Young Bee-Keeper.

God has seen fit to take from me my little son, Chester Brenner, aged 10 years, who has been a great help to me the past summer in the apiary. I gave him one colony of five-banded Italians, which stored for him 24 pounds of nice comb honey. He was making preparations for another season, to take charge of my apiary of 15 colonies.

C. W. BRENNER.

Newburgh, Ind., Nov. 14, 1892.

[Our earnest sympathy is extended to Bro. Brenner in his sad loss. "What a gathering that will be" "when we all meet at home, in the morning." Yes, many are the loved ones awaiting all of us "over there," who have gone on before, and will welcome us when we are called to the "better land."—Ed.]



CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

The Bee-Meeting at Dallas, Texas.

In the forenoon of Oct. 27th, the bee-keepers assembled in the Hunt Company's exhibit hall, and a committee of three appointed to pass on and judge the honey that was entered for competition. J. D. Givens, of Lisbon, A. Branshaw, of Dallas, and Mrs. Jennie Atchley, of Floyd, were selected to judge both the honey and bees. W. R. Graham, of Greenville, carried off the blue ribbon on the best section of honey, and J. T. Corbet on second best. The latter also took first premium on extracted honey and beeswax.

Dr. W. K. Marshall, of Marshall, took the first prize on the best colony of Italian bees. The judges thought he had a very fine queen. W. R. Graham was awarded second prize.

J. D. Givens had a very fine nucleus of five-banded bees, but was not competing. After the bees and honey were passed upon, the crowd dispersed, with the understanding that we should meet in a room on the third floor of the main exhibition building prepared for the occasion.

Promptly at 1:30 p.m. the meeting was called to order by the President, W. R. Graham, and as we were crowded for time, only having a few hours to meet, proceedings at once began.

BEE-KEEPING IN THE SOUTH.

The question-box was then opened. The President asked, "Is the bee-business on the increase in the South?" The answer came from all sides that scientific bee-keeping was on the increase rapidly, in that the old, loose, slipshod, log-and-box-hive bee-keepers were losing ground, and giving way to the modern and more profitable way of keeping bees, using the movable comb

hives, and caring for the bees as we would our other stock.

CROP REPORT FOR 1892.

Next a crop report was taken. About 500 colonies were represented, and the average per colony was 21 pounds, about half comb and half extracted, which shows we had a very poor season.

LARVÆ USED IN GRAFTING QUEENS.

While the crop report was being taken, the question list was completed. Dr. Marshall asked Master Willie Atchley how he could tell when he was grafting queens, whether he was using a drone larva or a queen larva. Willie answered that he did not use either, that he used a worker larva. Then he was asked, "How do you know whether you are using a drone or worker larva?" He promptly answered that he knew it was a worker larva because it was in a worker-cell, as a good queen did not lay drone-eggs in worker-cells.

This question brought out an interesting discussion by W. H. White, J. D. Givens, S. J. Darby and others, on whether the bees had the power to change the sex of an egg, and it was decided that they had not, as the queens and workers were reared from the same eggs, and were precisely the same sex; the queen being fed on richer diet, and having a large, roomy cell, she matured faster, and it gave her the power of becoming impregnated and taking up the duty of egg-laying, while the worker had barely food enough to put her through, and a small, tight cell which makes her a dwarf, while if all the larvæ had the privilege of subsisting upon the rich food and large roomy cells, they would all be mothers, and no workers.

QUEENS FROM OLD OR YOUNG MOTHERS.

W. H. White asked, "Are the queens reared from a queen in her last days, or from a queen three or more years old, as good as those reared from a young mother?"

Dr. Marshall thought that probably the queens would be somewhat weaker reared from the old mother. So did W. H. White, but J. D. Givens, Mrs. Atchley, W. R. Graham and others thought not.

DIFFERENCE IN YIELDS OF COLONIES.

"What is the cause of one colony gathering more honey than another when two are placed side by side and given the same chance?" was asked. The general answer was, that it was in

the working qualities of the bees, or the fault of the queen.

STARTING IN BEE-CULTURE.

Dr. Marshall then gave a talk on starting in bee-culture. He thought bee-keeping had now become self-sustaining, and that to start and make a success of it, the beginner should commence as cheap as possible, and take advantage of all the new improvements, study and observe closely, and not try to start too extensively, for if a failure should occur, he would not lose so heavily as if he had started more largely.

BEE-SWAX FROM OLD COMBS.

Mrs. Atchley gave her plan of making beeswax when the combs were too old and hard to melt well in the solar extractor, as follows:

Take a copper-bottom vessel, or an iron kettle, and place it on the fire filled with water; when it boils, put the old, black combs into a sack made of an old coffee-bag, and as it melts down put in more comb, then when the wax rises skim it off and pour into a tub of clear, cold water, and as it touches the cold water, it will cool instantly enough, so you can take the wax up and work and rinse it as you would a cloth, and by this process we can get all the impurities out. Ball it up and lay into another vessel until you are through, then melt and mold to suit you. The wax from old black combs will then be almost as nice as that made by the solar plan.

QUEENS FROM WHICH TO BREED.

J. D. Givens and W. H. White discussed the question of "Breeding Queens." Mr. Givens thought that a breeder should be in her second year. After they thoroughly discussed the question, it was decided that a queen in her second year was at her best as a breeder.

Mr. White asked, "Will a queen that has been confined, or kept in a contracted brood-chamber, be as good a breeder as if she had not been so kept?" Mrs. Atchley thought she would be just as good, if not better, as her constitution would hold out better.

MAKING HONEY-VINEGAR.

Next came a talk on honey-vinegar. Dr. Marshall said that he, one year, made and sold 100 barrels of honey-vinegar, and thought it as profitable as the honey. He made into vinegar a large amount of dark honey that would have been almost unsalable.

Mrs. Atchley makes a barrel or two of good vinegar every year from the cappings and broken pieces of honey, and rinsing all vessels that had contained honey, and pouring into a barrel of rain-water. She thinks it is superior to any vinegar, especially for table use.

QUEEN-REARING.

Mrs. Atchley was requested to read an essay that she had prepared on "Queen-Rearing," which is condensed as follows:

As some of our noted writers have said, "Around the queen centers all there is in bee-keeping," with worthless queens our time is lost, and bee-keeping is a failure, as good queens can be reared by almost any of the plans given. I will state that if the operator fails, it is his fault, and not the fault of the bees or the method, as we should see that all our queens are reared from larvæ not more than one day old. See that the queens are well provisioned, the cells well shaped and properly built out, and I will assure you large, long-lived, and prolific queens, which is the foundation of the bee-business.

BEE-KEEPING FOR WOMEN.

Most readers of bee-papers have already seen this subject exhausted, so I shall offer no further apology for using it than to say that I have been requested to do so. Between man and woman I see no occasion for a sex line in bee-keeping, but let it rest on the adaptability of either of them, whether they are capable of keeping bees. I contend that women have just as much right to keep bees, or to follow any other honorable pursuit, for that matter, as have men. Some of our most famous cooks in the land to-day are men, and worst of all is, they wear the "blue ribbon," so I claim that we have the right to cross the line, as the men invaded our territory first. I do not think it any compliment to woman to ask her if she could keep bees, as it casts a reflection upon her mental as well as her physical ability.

I think that a woman has a perfect right to try any pursuit that men are capable of running, until she diligently tries and fails. When we undertake bee-keeping, I think we should examine ourselves, and see if we possess grit, grace and generosity, as these are the three essential points of a successful bee-keeper. But, as Josh Billings has said, "We can't tell how far a toad will jump by looking at him," so I guess we

had better try to see how far we can jump at bee-keeping.

It is alleged by some writers that women ought not to have as much pay as men, even when we perform the same labor, but whoever heard of a nice section of honey selling cheaper just because it was produced by a woman? This I will leave for the wiser ones to answer.

At about 4 o'clock it was decided that we adjourn *sine die*, and the benediction was pronounced by Rev. Dr. Marshall. A general hand-shaking then took place. Our time was short, and attendance rather small, but all present were enthusiastic, which made our short meeting very interesting.

A. H. JONES, Sec.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
Nov. 28.—Allegany Co., at Angelica, N. Y.
H. L. Dwight, Sec., Friendship, N. Y.
Dec. 1.—Rock River, at Morrison, Ills.
J. M. Burtch, Sec., Morrison, Ills.
Dec. 1.—Carolina, at Charlotte, N. C.
A. L. Beach, Sec., Steel Creek, N. C.
Dec. 13, 14.—Michigan, at Lansing, Mich.
Geo. E. Hilton, Sec., Fremont, Mich.
Dec. 14, 15.—Eastern Iowa, at Maquoketa.
Frank Coverdale, Sec., Welton, Iowa.
Dec. 28, 29.—Vermont, at Burlington, Vt.
H. W. Scott, Sec., Barre, Vt.
1893.
Jan. 13, 14.—S.W. Wisconsin, at Boscobel, Wis.
Edwin Pike, Pres., Boscobel, Wis.
Jan. 18, 19.—Colorado, at Denver, Colo.
H. Knight, Sec., Littleton, Colo.
Jan. 12-14.—Minnesota, at Minneapolis, Minn.
A. K. Cooper, Sec., Winona, Minn.

In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association
PRESIDENT—Eugene Secor, Forest City, Iowa.
SECRETARY—W. Z. Hutchinson, Flint, Mich.

National Bee-Keepers' Union.

PRESIDENT—James Heddon, Dowagiac, Mich.
SECY AND MANAGER—T. G. Newman, Chicago.

There is Not One Person but what can secure at least two new subscribers to the BEE JOURNAL, and get the splendid Premium offered on page 685. Try it.



Suggestions About the Improvement of Bee-Literature.

Query 846.—What general suggestions can you offer along the line of the improvement of current bee-literature (not bee-books), so as to make it more helpful to the beginner, as well as profitable to the more experienced reader?—Missouri.

At present I have nothing to offer.—E. FRANCE.

At present I have nothing to offer.—H. D. CUTTING.

For each one to do his share, telling every useful thing he has learned.—C. C. MILLER.

I have no suggestions to offer. I think our present periodical about as good as it can now be made.—M. MAHIN.

I cannot suggest any improvement in matter or management of our leading bee-periodicals.—EUGENE SECOR.

The death of one-half of the bee-papers, and more careful editing and writing for the remainder.—R. L. TAYLOR.

Plainness, greater fulness of detail—in fact, make your writings a sort of "A B C" of bee-culture.—MRS. L. HARRISON.

I think our leading bee-papers are well edited, with material fitted for bee-keepers "in all stages."—MRS. J. N. HEATER.

Special departments in the bee-papers, giving explicit weekly (or monthly) directions for the care of their bees.—W. M. BARNUM.

Root out all superfluous and worthless bee-literature, and teach the rising generation to eat honey, and be happy.—J. M. HAMBAUGH.

Experienced bee-keepers, and also beginners, should not encourage the starting of more new bee-papers, but by

giving better support to the old and deserving papers we now have, they will thereby serve their best interests. Good bee-papers, as well as good newspapers, need a long subscription list.—G. L. TINKER.

After the style of the early volumes of the old AMERICAN BEE JOURNAL, the *Bee-Keepers' Magazine*, the *Bee World* (Moon's), etc., before the "dashing writers" were born.—J. P. H. BROWN.

I think the various bee-periodicals are doing the very best that can be done. The trouble is, that what is interesting and helpful to the beginner, is "dry stuff" to the experienced.—C. H. DIBBEHN.

So many can be offered, that space could not be given for them. It strikes me, though, that the bee-literature of the day is doing pretty well as it is; I mean the articles coming from practical workers.—J. E. POND.

It seems to me that there is not much room for suggestion. It seems to me that our leading bee-periodicals are away at the top. They are even now ahead of the average reader. I know of no literature less open to criticism.—A. J. COOK.

It appears to me that all has been, and is being, done in bee-literature that can be done to help along the line you mention. The beginner is most likely to be overlooked in our bee-periodicals. Most writers would hesitate to go back and minutely describe.—G. W. DEMAREE.

First, most, and all the time, wipe out the perpetual curse of filling our bee-papers with the writings of apicultural literarians, and replace it with honest reports and opinions from honey-producers who make bee-keeping pay. Dollars and cents are conservative, and when you win them at bee-keeping, I have faith in your skill.—JAMES HEDDON.

Now, there's a nice, large question for you. In general terms, to be "helpful to the beginner," it must teach him how to keep bees. To be "profitable to the more experienced," it must teach him better and cheaper methods of producing honey and performing the necessary work of bee-keeping. In both cases, it looks to me as if practical information is what is called for.—JAMES A. GREEN.

Mr. Missouri, you have got me this time, and I guess this will puzzle the most of us, as we would all love to learn, and as we do not know nearly all of bee-

culture yet, and may be never will. But I think we should take up plain, practical ideas, that we use every day in our apiaries, especially those that prove most successful, and by this means we can possibly interest each other, and beginners, too. Why, when I meet a good bee-keeper at a convention, or at his home, I will just oppose some of his ideas, even if I know I am wrong, just to get something good from him. He will talk then.—MRS. JENNIE ATCHLEY.

Every beginner should have at least one, or two, of our best bee-books, and so thoroughly and carefully read it that they are perfectly familiar with the contents thereof. Having done this, any of our best bee-papers will be "more helpful" than they were before. No beginner has any right to ask that a paper be published in his interest, when he is unwilling to buy a book which is especially adapted to his requirements. It would be much like requiring a newspaper to teach him what he should learn in his primer.—G. M. DOOLITTLE.



Report of the N. E. Ohio, N. Pa. and W. N. Y. Convention.

BY GEORGE SPITLER.

The Northeastern Ohio and Northern Pennsylvania and Western New York Bee-Keepers' Association met in the Eureka Mineral Springs Hotel parlors at Saegerstown, Pa., on Oct. 19th, for a two days' session. In the absence of President M. E. Mason, of Andover, O., the Secretary called the meeting to order. C. H. Coon, of New Lyme, O., was chosen President, *pro tem*.

The calling of the roll showed but a few of the old members present. The Secretary's and Treasurer's reports showed the financial part of the Association on a sound basis.

The committee appointed in the interest of an exhibit, at the Columbian Exposition, of the products of the apiary,

reported that nothing had been done. Among the reasons given were the limited amount of space at the disposal of exhibitors, and also the expense. The committee reported that the Ohio State Bee-Keepers' Association was going to make an extensive exhibit, and any members of this Association could join with them, or if they saw fit, could make individual exhibits. The programme was then taken up.

How to Advance the Pursuit.

The first topic was, "How to Advance the Best Interest of Our Pursuit."

L. D. Freeman urged the importance of more interest and enthusiasm in the business. He said that for 40 years he had been a bee-keeper, and in all that time he found no year so poor as was 1891. The past season he had a fair yield of honey. He urged the importance of farmers becoming bee-keepers, for the reason that without bees and other insects to distribute the pollen of fruit-blossoms from flower to flower, little fruit would be produced, no matter how well trees were cared for. If farmers were to give proper attention to the business, much sweet that is now wasted could be utilized and made to yield pleasure as well as profit.

Swarming and Self-Swarmers.

The question of swarming was discussed in all its details, but no new facts were elicited. What are known as "self-swarmers" and "self-swarming hives" were touched on, but no one present had experience enough to warrant recommending them.

Uniting Colonies of Bees.

On the question of "uniting and doubling up," nothing new was brought out. It was generally agreed that uniting weak colonies in the spring did not pay. Rather let the weak ones build up, and take brood from such to strengthen those that are not quite strong enough to get into the sections with a vim at the commencement of white clover bloom. It was thought bad policy to take brood from the *strong* colonies to build up weak ones, as one strong colony is worth more than two medium ones.

Introducing Queens.

This subject occupied some time, but no new facts were developed. In case a *valuable* queen is to be introduced, it was recommended that a nucleus be formed by taking several frames of sealed brood, much of it just ready to

emerge from the cells, and *young* bees, just from the cell, and introduce the queen by placing her on top or between the combs. The result will be a safe introduction. With care, it was thought that any of the methods given in standard works on bee-keeping will prove successful.

Owing to the political meeting and torchlight procession in town, bee-keepers "swarmed out," and no session was held Wednesday evening.

How to Secure Comb Honey.

On Thursday morning the first topic discussed was, "The Best Method of Securing Comb Honey."

C. H. Coon discussed it at length, and answered questions that covered a large part of the different operations in the management of the apiary. The person who is a successful comb honey producer must commence the previous fall. Have strong colonies with plenty of stores. Also be sure to have a young, prolific queen. In reply to "How is a person to know he has a good queen?" he said, judge her by what she has done. In the spring build up your colonies as quickly as possible, which will be helped greatly by what is called stimulating—feeding a little each day. Have only clean, nice sections. He does not recommend the use of sections used the previous year unless very clean and bright, with very white comb. Put sections on just as soon as bees begin to whiten the top of the frames with new comb. Take off the honey as soon as it is nicely finished, and put it in a dry, airy place.

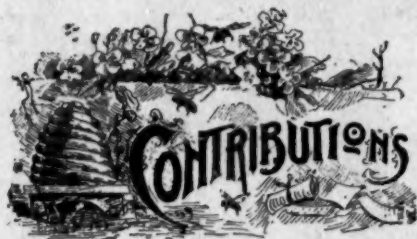
Exception was taken to Mr. Coon's method of spring management. It was thought best to know the condition of colonies before May or June, for best results. Should a colony be queenless, a queen should be given to it; also, they might need feeding, which, if attended to, might save valuable colonies.

Next Place of Meeting and Officers.

Union City, Pa., was chosen for the next place of meeting, in October or November, 1893, the exact date to be fixed by the officers.

The following officers were elected for the ensuing year: President, E. S. Crooker, Union City, Pa.; Vice-President, C. S. Pizer, Franklin, Pa.; Treasurer, L. D. Freeman, Blystone, Pa.; Secretary, Geo. Spittler, Mosiertown, Pa.
GEO. SPITTLER, Sec.

Don't Fail to read all of page 685.



The Adulteration of Honey— Shall it be Stopped?

Written for the American Bee Journal
BY THOMAS G. NEWMAN.

After carefully reading the article by Prof. A. J. Cook, on page 663 of the *BEE JOURNAL* for this week, I would like to say that I fully agree with him as to the *crime* committed by those who adulterate honey and sell it as genuine. And since the price of glucose has kept pace with the price of honey in its downward course, the villainous practices of adulterators have increased considerably. It is therefore a *necessity* to use every practical method to crush the viper which is seeking to destroy our honorable pursuit.

Prof. Cook has made an excellent suggestion about the enactment of a United States law against adulteration. The Hon. R. L. Taylor is just the person to frame such a law, and I feel sure that he will do it. Then, at the Capital we have influential friends, who can aid us. A wonderful amount of assistance can be given to such a measure by Assistant Secretary Willits, of the Department of Agriculture (formerly President of the Michigan Agricultural College); Dr. C. V. Riley, Chief of the Division of Entomology, and Mr. Frank Benton, the Apiarist of the Department of Agriculture, as well as several others I might name, who are located at head-quarters.

But there should be no attempt to conceal the fact that it will take money to have some one go to Washington and press the passage of such an Act of Congress. Are bee-keepers willing to put their hands down into their pockets and furnish the "sinews of war" for this purpose? If so, it can be done! To accomplish it, three things are necessary, and without these it will be totally useless to make any move in that direction, and these are:

First, a determination to succeed.

There must be no half-hearted, "milk-and-water" fighting—no dilatory tactics, nor foolish sensitiveness. We must go in for "war to the knife," and as the old and somewhat inelegant maxim very forcibly expresses it—"fight the Devil with fire." Unless an enthusiasm can be worked up which will begin and end with a fearless determination to crush out the viper—do not think of doing anything at all! Just lie still and let the monster of iniquity triumph! Let it mount the pursuit like a dung-hill, and lustily "crow" over the cowards who dare not defend their chosen vocation!

Secondly, money must be available. Without it, determination is but bluster, and indignation is only a mockery! If 5,000 bee-keepers will rise in their might and majesty, and each present a dollar to prosecute this work, then success is possible. If only 500 are brave enough to do so, out of the 300,000 bee-keepers of America, and 299,500 lag behind like cowards—then drop the matter right here, and submit to the degradation and ruination which must result to the apicultural profession!

Thirdly, above all, a vigorous, pushing leader is indispensable. He should be young, full of enthusiasm, and possess the magnetism which will draw the forces after him. Of course he must be cautious, and always on the alert—able to meet the deceptive tactics of the opposition, and check-mate all the moves of the enemy. With such a leader, marshalling on the forces, 5,000 strong, with money for full equipment, there is no telling what might not be done.

Now, what will apiarists in general say to this? Reader, are you ready for the fray? If so, let us hear from you at once. There is no time to be lost, if the work is to be done at the next session of Congress.

I would thank Prof. Cook for his words of approbation for the gratuitous work I have successfully done as General Manager of the National Bee-Keepers' Union. Evidently the Union intends to take no steps for a change, so as to take up this work as suggested some time since—for not even one response to that appeal has been heard. I suggested a way to accomplish the work, but no action has been taken so far as I have heard. Perhaps that settles the matter in that direction.

As the Professor suggests that I take the management of the prosecutions of adulterators, let me add that though I am much improved in health since last spring, still I have not the energy one

should have to do this work. Had this matter developed 20 years ago (when I was 40, and in my prime) I might have been induced to take it in hand, but now I feel that my days of usefulness are nearly at an end; and while "old men" are essential for counsel, it takes the younger men to fight. I am willing to do what I can to further the object sought, but desire to be excused from taking the management of such an important undertaking.

Chicago, Ills., Nov. 17, 1892.

Bees and Honey in Bee-Trees— Italians vs. Native Bees.

Written for the American Bee Journal

BY C. J. ROBINSON.

Referring to "Query" No. 841, I beg leave to mention, in answer thereto, that every disciple of Blackstone (the expounder of the common law) is cognizant of the plain principle of law involved in the question. "If I buy a woodland," all of the natural growth—trees included—upon the land is a part and parcel of the freehold which grantors of land convey by deed in all States. Hence, trees in which bees have deposited honey are included in the title of the grantee as a part of the purchase; so also the honey is a product of the land where deposited by the bees, and though the honey is not a part of the freehold, it is personal property belonging to the owner of the land, the same as any product of farm lands.

In case A "finds a bee-tree" on B's land, the discovery does not acquire title to the tree or the honey, in a legal sense, no more so than the discovery of any other tree, or ore of any kind. The common law does not recognize *property* in creatures naturally wild; so, whoever discovers a colony acquires a title to them against any who have not taken formal possession of the colony—only the bees.

Concerning "trespassing," each State enacts laws setting forth what constitutes trespass, and the common law provides a remedy for trespass upon real property.

ITALIAN AND NATIVE BEES.

I have just perused Hon. Eugene Secor's article on page 531. I will not attempt criticism, but I will ask of any real, expert bee-keeper, whether or not himself or others are able to demonstrate as a fact that "the Italian bees,"

as a variety of *Apis mellifica*, are superior in any point, or points, when compared with the native variety of this country? I mean the taking into consideration the production of marketable honey during a series of years.

I have experimented during more than half a century, was concerned in the first successful importation of Italian bees, have had queens from many breeders of Italian queens, and compared the behavior and the products of the two varieties named, and still I ask the foregoing question.

I am well aware that a considerable difference is noticeable in colonies of both races. The first importation direct from Italy came from the region of Lake Como. Most of the importations are from Milan—not much above the level of the sea. Climate has something to do with bees as domestics and their appearance. The climate of the middle and northern States compares nearer to that of the Alps region than that of Milan; hence, bees inured to the Alps climate, it may be inferred, are better adapted to our cold climate than bees bred in a climate like that of Milan.

Richford, N. Y.

Clipping the Wings of Queens— Is it Advisable?

Written for the American Bee Journal

BY "MALTA."

The article by Mr. Eugene Secor, on page 112 of the BEE JOURNAL for July 21st, having brought up the question of clipping queens' wings, I would like more information on the subject on two points.

1st. Is it advisable as regards economy of labor and anxiety on the part of the bee-keeper?

No doubt clipping will prevent the queen flying with the swarm, and she will fall to the ground close to the hive, and so be easily captured and treated as most convenient; but what of the swarm? Is it not so scattered, and consequently so reduced in numbers, as to be almost useless when gathered and hived? Do not a large number of the bees very reluctantly return to the parent hive with the idea in their heads, or instincts, that the attempt to carry out the natural laws of increase has failed? and will not instinct cause them to "after-swarm" or "cast" at the first opportunity? while if the re-clipped

queen be returned, and the queen-cells all destroyed, they are almost certain to swarm again, and perhaps at a bad time.

2nd. Is clipping not likely, if persistently carried out throughout an apiary, to result in a race of deformed bees (as regards wings) in the future? for both in the animal and vegetable kingdoms malformation, however caused originally, may become hereditary; and so much is this recognized that anything of the sort is, if objectionable, carefully avoided, or if ornamental or useful, as carefully fostered and made much of by rearers of stock, or by gardeners in selecting the animals or plants to breed from.

I do not see why bees should be an exception, and fear that if carried too far this practice may have an evil result.

There certainly remains the safeguard that even if the young queen has a tendency to deformity, she will in all probability mate with a perfect drone, for any other would surely be out-paced in flight, and so lose the opportunity; but on the other hand, the drone being the "son of his mother," and fatherless, he will inherit to the full any infirmity, and consequently, if all drones in an apiary are the offspring of wing-clipped mothers, themselves the daughters of clipped queens, and descended from a succession of the same, the chances are greatly in favor of an hereditary tendency to deformity.

For these reasons I deem it undesirable, and think that the strict followers of the practice are treading on dangerous ground; but I should much like to have the opinion of its advocates in this connection.

Panama.

Cellar vs. Out-Door Wintering— Fire or No Fire in Cellars.

Written for the American Bee Journal

BY DR. C. C. MILLER.

Last winter I left 12 colonies of bees out-doors all winter. I'll not leave the same 12 out this winter. Couldn't if I wanted to, for just 12 of them died before the winter was over. I wasn't altogether to blame for it, because they were left out with the expectation of being provided with protection that I was disappointed in getting. But when I found I was disappointed it was well started into the winter, and as it didn't seem severe, I thought I'd risk leaving them without protection of any kind,

and see how they would come out. I saw.

I feel a good deal like saying I'll not fuss any again with out-door wintering; and still I can't get rid of the feeling that I'd like to succeed in it. I have done so, to a degree, by using proper protection, but on the whole I have done best by wintering bees in the cellar. The reason that I'd like to winter bees out-doors is, that I have just a little notion that when bees winter out in the pure air, they are in a little better condition to commence work in the spring. Still, if they have good air in the cellar, I don't see why they ought not to do just as well there. But just there is the rub. Have they as good air in the cellar?

I did something more. It seemed a mild winter, and I thought I would see if bees could not get along without fire in the cellar. They did get along, but it was a pretty bad sort of a "get along." I cannot say how many colonies I lost by it, for the spring and early summer were so bad that they kept dying off for a long time after they were out of the cellar; but I know that an unusually large number died in the cellar, and, moreover, I think that some of those that succumbed after coming out might have pulled through if they had not been weakened by the bad effects of their bad wintering.

Now one lesson that I ought to learn (and it is a lesson that others may learn as well) is, that it is not a good thing to try experiments on too large a scale. I ought to have been satisfied with killing 6 colonies instead of the 12 left out without protection. I ought to have been satisfied to leave one cellar without fire, instead of both.

Then another lesson is, that it is a good plan to "let well enough alone." I have been quite successful in wintering bees in the cellar with fire, and perhaps I ought not to yield to a hankering after something different. I hardly expect to hold right to exactly the same kind of wintering all the rest of my life, for I know myself too well not to expect some new bit of foolishness, dear knows in what direction, but I think I'll at least try.

It's a good rule to follow somewhat in the light of your past experience, at least so far as that experience is a successful one. If a friend should ask my advice as to how he should winter his bees, I should first ask how he had wintered them, and if he had been reasonably successful, I should advise him to make no change. If he had a climate

and locality like mine, alike in all respects, and had a cellar just like mine, had wintered bees always out-doors with an average loss of 6 per cent., while I had wintered mine in the cellar with a loss of 5 per cent., I should say to him, "Stick to your out-door wintering. You know that, and you don't know cellar wintering. True, you lose one colony in a hundred more than I, but if you try my plan you may lose ten more than I, and if I should try your plan I might lose 20 more than you." There's a great deal in being used to a thing.

Latitude is not a thing to be depended upon too much. I am in latitude 42° north. The same latitude on the Atlantic coast is very much milder. I think the winters north of me, in Wisconsin, are not so severe on bees. Perhaps one reason may be the greater sweep of wind here. Possibly less snow.

As to fires in cellars: Some object seriously to anything of the kind. "It isn't natural. Who ever heard of bees in a state of nature having fires?" True enough. Then comes the objection, "I know that fires are bad, for I tried it one winter, and that's the only winter I lost heavily in the cellar." But, my friend, while I am willing to say that your experience may be a safe guide for you, it may not be so for everybody else. My experience has been just the reverse, and perhaps it is the wise thing to conclude that in your case fires are bad, and in mine good.

"But fires are artificial, and every one has noticed that people who are kept in the house beside the fire all the time are not so rugged as those who spend their lives mostly out-doors. Will not the same rule hold with bees?" In reply I may say that people are not bees, but admitting that they are the same, and admitting that all you say is true, I'm not sure that it proves that my cellar is better without fire. I grant you that as a rule the air is not so good where there is a fire, and that people as well as bees are better in the open air; but it does not follow that in all cases it is the fire that does the mischief. The man who sits all day long in his counting-room with a comfortable fire on a December day, is not so healthy as the man out in the snow hauling wood; but would the man in the counting-room be any better off without the fire?

I think there was never so much mold and bad air in my cellar as last winter. A fire kindled there would have changed the air and if the air had been kept pure there would have been no mold. I have

no quarrel with you because you do not need fire in your cellar. If you can keep it warm enough without, by all means keep the fire out, but even if you must believe that fire does harm, if the cellar cannot be kept warm enough without it, I insist that the fire will not do as much harm as a depressingly low temperature. Marengo, Ills.

Feeders for Feeding Bees their Winter Stores.

Written for the American Bee Journal

BY C. A. BUNCH.

After trying several bee-feeders to feed up for winter stores, I have come to the conclusion that no perfect bee-feeder will ever be constructed where the bees have to climb up the sides of the feeder, then down to the food of syrup. My reasons are these:

Some colonies refuse to, and cannot, be coaxed to go up into a pan or wooden butter-dish to get their food, which is quite aggravating when winter is coming on; but so far the pepper-box feeder, or a two-quart Mason fruit-can of syrup with the lid perforated (this to be inverted right over the colony to be fed), has the desired effect. A better feeder is made as follows:

Get a tin-smith to make a square tin-box about four or five inches deep, and as large as the top of the hive; the top and bottom of the tin-box should be soldered on tight. Now make a lot of perforations on one side of the feeder; next solder on a flange all the way around on the outside, this to be $\frac{3}{4}$ of an inch high to make a bee-space. The feeder is now finished.

To fill with syrup, place the top side down, the flange or side-boards will keep the syrup from running down the sides. It can now be quickly inverted over a pan to catch some syrup that will run out. Now place it over the colony to be fed, and the bees will do the rest. Of course we all know that the idea is old, but the feeder is the best that I know of. By the way, who will make these feeders and keep them for sale?

Now that the majority of bee-keepers who produce comb honey use the eight-frame hives, which are too small to hold honey enough to last over until white clover, I think that entrance feeders would come into good play, to be made with a snout or trough to be pushed in at the entrance right under the cluster

The object in this is to feed without disturbing the bees, through letting out the warm air by removing their winter packing. As I have had experience enough at opening up colonies of bees in early spring to feed, I consider it up-hill business—business that is not pleasant or profitable.

Nye, Ind., Nov. 1, 1892.

Experience with Different Bees, Hives, Etc.

Written for the American Bee Journal

BY W. M. SCRUGGS.

I have given my entire attention to the apary this season, and have learned a great deal, though I think there is still more to learn. I have several kinds of bees. The black bees, I will have to confess, are good honey-gatherers, though I like the five-banded Italians better, because they are gentler, and keep the moths out better than the blacks do. As for the amount of honey, I have found little or no difference.

I have the dark or steel-colored Carniolan bees, which I believe to be the best. They are gentler and easier to handle than the Italians; they are some larger, and very hardy.

I have a variety of hives for experimenting, and find the shallow hive the best for comb or section honey. The bottom story should be wide enough to take frames $21\frac{1}{4}$ inches long by 6 inches deep. They should be long enough to use 18 frames when full, and the hive should have a division-board so as to give room just as the bees need it. This style of hive will admit a case with 90 one-pound sections. It will surprise you to see how quick the bees will fill the sections in this style of hive.

I have some hives with tin-plate large enough to cover the entire bottom-board, and nailed on the bottom of the hive before the wood bottom is put on. I call this hive "moth-proof," as I have not seen any sign of moth about them, and the bees keep the bottom so clean and nice. A great deal of pains should be taken to make a hive air-tight—all except the entrance, and this should be at one end of the hive at the bottom. This enables the bee to carry out any matter without climbing up to get out with a heavy load. A hive ought to be placed in a shade from 9 to 3 o'clock in the daytime, and in a clean place, and salt should be sprinkled around the hives.

If our farmers, who have girls, and think they are expensive, will only spend a few dollars for bees and good bee books and papers, and turn them over to the care of the girls as their own property, those farmers will find their store account much less, and a dish of nice honey on the table. Besides, the girls will have money to spare in a few years.

I am pleased to read the writings from Mrs. Jennie Atchley and other women who have been writing for the AMERICAN BEE JOURNAL. I am glad to see our sisters taking an interest in a business that pays so well as does bee-keeping.

This, being in the Cumberland Mountain region, is a fine place for bees. It is healthy, and land is cheap here.

Tracy City, Tenn.

The Development of Apiculture in Colorado.

BY H. KNIGHT.

The honey-bee is not a native of America. The first were brought here and landed in Boston in 1670. Since that time the little honey-gatherer has traveled either by natural swarming, or some enterprising bee-keeper has taken them, hive and all, into every State and Territory in the Union.

The first brought to Colorado was in 1862, by Isaac McBroom, of Fort Logan, who hauled one colony across the plains by ox-team. They did not increase any, but after one season died. In 1866, ex-Gov. A. C. Hunt brought a colony to Denver by wagon. These also died without increase, the second winter. Shortly after the railroad reached Denver, in 1870, a carload of bees were brought here and sold to several that wanted to buy, at \$25 per colony. From these the industry grew.

The object of bringing them to America, and later to Colorado, was two-fold. First, because of their healthful and delicious product, and second, the great benefits derived from their work in the fertilization of blossoms. The great naturalist, Darwin, truly says: "The more bees, the more flowers; the more flowers, the more seeds; the more seeds, the more flowers; the more flowers, the more seeds." If all the bees were taken out of the country, less seed would be raised, and less fruit grown, because the honey-bees are the principal agents by which the pollen is carried from one flower to another, and thus the bloom is fertilized and becomes seed-bearing.

Before the introduction of alfalfa into Colorado, wild flowers furnished a scanty supply of nectar, and the bees were often short of stores for winter, and spring would bloom forth to find but few bees to kiss her flowers, they having died of starvation.

With alfalfa came the red, white, Alsike, and sweet clovers, until now, thousands upon thousands of acres of alfalfa, thousands of acres of red clover, and miles of ditches and streams are lined with sweet clover, and many pastures and fields of white and Alsike are to be found.

Of the indigenous plants, cleome (Rocky Mountain bee-plant, skunk weed) is the best, and it has increased rapidly since the advent of civilization, so that to-day the honey-flow is considerably prolonged in regions where it abounds.

With these changes in the flora, the progress of the bee-keepers changed also. When wild flowers were the only dependence for honey, the apiarist asked for a wet season, as it was the best for honey. Now he prays, if he has time, "Please give us a dry season with an abundance of irrigating water, and keep foul brood out of my apiary." Another season he will add, "And please kill all the grasshoppers."

Twelve years ago (1880) J. L. Peabody, E. Milleson, and Mrs. Olive Wright, met in Denver and formed the Colorado State Bee-Keepers' Association. There was then but few bee-keepers, and about 250 colonies of bees in the State. Nine years ago the coming winter, the writer had the pleasure of attending a meeting of the association held in the County Commissioner's room. About ten persons were in attendance. In December, 1888, the association was incorporated under the laws of the State.

In 1890 the apiculturists of the western slope met in Montrose, and organized the Uncompahgre Valley Bee-Keepers' Association, with J. T. Hartop as President.

In 1891 two associations were born. First, the Northern Colorado Bee-Keepers' Association, at Longmont, with R. F. Coffin as President, and D. L. Tracy Secretary. This association now has 73 members. In September of the same year the Weld County Bee-Keepers' Association was organized at Greeley, with D. S. Beal President, and H. E. English Secretary. This association numbers 60 members.

All of the above associations are in a thriving condition, and ere another year

rolls around as many more will be formed.

To get at the number of colonies in Colorado is a difficult problem, but after getting statistics from assessors and county inspectors, and from correspondence with bee-keepers, the number can safely be put at 64,000 colonies. Boulder county leads them all with 18,000. Of these bees it can be said that fully four-fifths are in movable-frame hives. One-fourth are owned by specialists, and another fourth by semi-specialists, and one-half are in the hands of farmers that only about half take care of them. The last named get only comb honey, and average from nothing to 30 pounds per colony, and save about one-tenth of the increase. Those making a specialty of the business get from 50 to 150 pounds of section honey, or 75 to 200 pounds of extracted, in the average season.

Placing the honey-production at 60 pounds per colony with the specialist, 30 pounds with the semi-specialist, and 10 pounds by the farmer bee-keeper, which, I think, a fair estimate, would make a honey crop of 1,760,000 pounds; the average price of which has been about 11 cents per pound, making the honey crop worth \$193,600 per year, 1892 not taken into consideration, as there is not one-fourth of a crop.

The amount of wax saved by bee-keepers is very small, as so many of them throw all scraps away; but, nevertheless, about 1,500 pounds is put on the market each year in this State, the price of which is 25 cents, or \$375 on the yearly crop. This amount could be greatly increased by the saving of all scrapings and scraps of wax.

The amount of cash represented in the business each year is about \$561,975. This does not include wages paid to hired help, which is considerable, as many bee-keepers have so many bees that it becomes necessary to have assistants.—*Read at Colorado Convention.*

Littleton, Colo.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 711, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present

Have You Read page 685 yet



Cheap Honey in California.

If there is any cheap honey offered on this coast this year it ought to be inspected to see if it has not been adulterated. There is but little honey on hand, either of extracted or comb. There are parties in San Francisco who boast that the honey crop is not short this year, and that they have handled 12 carloads themselves this season. To them this may seem a large crop of honey, but it proves nothing, for in an extra good year two apiaries in this Southern California could fill such an order and then have some stock on hand. The truth is there has not been a full yield anywhere in this locality, while in many sections there has not been a pound of honey produced, and in others the bees have been fed to keep them from starving. Cheap honey on this coast means adulterated honey, and our statutes ought to be enforced to prevent its sale and punish the adulterator.—C. N. WILSON, in *Rural Californian*.

Extracting Beeswax.

I will give my way of making wax, though it may not be the best way, but it does very well for the small amount I have. I never melt good comb, unless the moths get ahead of me and compel it. It is usually scrapings from the bottom of boxes, hives and break-joint honey-boards, which seem to be of no value at all, but if properly treated it will produce nice, light-colored wax.

Put the material from which the wax is to be made into a metal sieve, and place this over a pan of water, and then set in a moderately warm oven. It needs to be watched very carefully, or it will run over. I have often resolved never to melt wax on the kitchen-stove while busy with other cares, for if I do, I am sure to be sorry for it. It will be forgotten, and only called to remembrance by a stream of yellow wax running from the oven. I have a honey-

house with a cook-stove in it, and when I go out there to work, my mind is upon honey and wax, and I seldom forget it. I have several pans of the same size, and after nearly all of the wax has run through the sieve, I change it to another pan, in this way making sure that it will be saved.

If boiling water is used when first put in, it is apt to run over before the wax is melted; therefore it is better to start with cold water. After the wax has cooled in the pans, I remove it and scrape out the pollen and propolis, so as to be ready to place the sieve over it again. This debris I often scrape into a paper, to use in kindling a fire. These cakes of wax I remelt in a pan placed over a kettle of boiling water. Melt out the ends of a fruit-can and tie cheesecloth over it, and set it in a basin, pour the melted wax through it; stop if there are any dregs. I keep a half dozen quart basins, so as to have the cakes all of one size, and when a melted basin of wax has settled, before it begins to congeal, pour it into another, leaving the dregs.

As we produce comb honey almost exclusively, there is little but the scrapings to melt, and the yield is only 10 or 12 pounds yearly. I have succeeded better in this way, and the product has been more satisfactory than when I put the contents into a bag and boiled it in a kettle of water with stones on top to keep it down.—MRS. L. HARRISON, in *Orange Judd Farmer*.

Corn-Cobs as an Absorbent.

After experimenting with various substances, the well-known absorbent power of corn-cobs induced me to try them, using them whole, and filling the interstices with dry, fine sawdust, which answered very well. Afterward I had them ground at a feed-mill, and filled the boxes three inches with this meal and I want nothing else. Cobs chopped and mixed with dry sawdust do well. This is practically a non-conductor of heat, and it is dense and porous, and has the capillary force—like blotting-paper—to carry moisture to the outer atmosphere. To illustrate the capillary force, suppose we build a new hive from lumber sawed transversely four inches thick—sides, ends and cover joints hermetically sealed. This would certainly be a warm hive, and, with the capillaries or pores of the lumber directed from within outward, you would never find a drop of water condensed on

the inside as long as the temperature within was above freezing, and the surface free from propolis. Bees in their natural homes have the benefit of this capillary force.—*Gleanings*.

CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the *American Bee Journal* must be sent with each order for another paper or book:

	Price of both.	Club.
The <i>American Bee Journal</i>	\$1 00.....	
and <i>Gleanings in Bee-Culture</i>	2 00.....	1 75
<i>Bee-Keepers' Review</i>	2 00.....	1 75
<i>The Apiculturist</i>	1 75.....	1 65
<i>Bee-Keepers' Guide</i>	1 50.....	1 40
<i>American Bee-Keeper</i>	1 50.....	1 40
<i>Canadian Bee Journal</i>	2 00.....	1 75
<i>Nebraska Bee-Keeper</i>	1 50.....	1 35
The 8 above-named papers.....	6 25.....	5 25
and <i>Langstroth Revised (Dadant)</i> 2 40.....	2 25	
<i>Cook's Manual</i>	2 00.....	1 75
<i>Doolittle on Queen-Rearing</i>	2 00.....	1 65
<i>Bees and Honey (Newman)</i>	2 00.....	1 75
<i>Advanced Bee-Culture</i>	1 50.....	1 40
<i>Dzierzon's Bee-Book (cloth)</i>	2 25.....	2 00
<i>Root's A B C of Bee-Culture</i>	2 25.....	2 10
<i>A Year Among the Bees</i>	1 50.....	1 35
<i>Convention Hand-Book</i>	1 25.....	1 15
<i>History of National Society</i>	1 50.....	1 25
<i>Weekly Inter-Ocean</i>	2 00.....	1 75
<i>The Lever (Temperance)</i>	2 00.....	1 75
<i>Orange Judd Farmer</i>	2 00.....	1 70
<i>Farm, Field and Fireside</i>	2 00.....	1 75
<i>Prairie Farmer</i>	2 00.....	1 75
<i>Illustrated Home Journal</i>	1 50.....	1 35
<i>American Garden</i>	2 50.....	2 00
<i>Rural New Yorker</i>	3 00.....	2 25

Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

"The Winter Problem in Bee-Keeping" is the title of a splendid pamphlet by Mr. G. R. Pierce, of Iowa, a bee-keeper of 26 years' experience. It is 6x9 inches in size, has 76 pages, and is a clear exposition of the conditions essential to success in the winter and spring management of the apiary. Price, postpaid, 50 cents; or given as a premium for getting one new subscriber to the *BEE JOURNAL* for a year. Clubbed with the *BEE JOURNAL* one year for \$1.30. Send to us for a copy.

Be Sure to read offer on page 685.



PUBLISHED WEEKLY BY

GEORGE W. YORK & CO.,

At One Dollar a Year,

199 RANDOLPH ST., CHICAGO, ILLS.

TO CORRESPONDENTS.

The *Bee Journal* is sent to subscribers until an order is received by the publishers for its discontinuance, and all arrearages are paid.

A Sample Copy of the *BEE JOURNAL* will be sent FREE upon application.

How to Send Money.—Remit by Express, Post-Office Money Order, or Bank Draft on New York or Chicago. If none of these can be had, Register your Letter, affixing Stamps both for postage and registry, and take a receipt for it. Money sent thus, IS AT OUR RISK; otherwise it is not. Do not send Checks on Local Banks—we have to pay 25 cents each, to get them cashed.

Never Send Silver in letters. It will wear holes in the envelope, or may be stolen.

Make all Money Orders Payable at Chicago, Ill.—not at any sub-station of Chicago.

Postage Stamps of any denomination may be sent for any fraction of a dollar; or where Money Orders cannot be obtained, stamps for any amount may be sent.

Subscription Credits.—The receipt for money sent us will be given on the address-label of every paper. The subscription is paid to the END OF THE MONTH indicated.

Do not Write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Emerson Binders, made especially for the *AMERICAN BEE JOURNAL*, are convenient for preserving each weekly Number, as fast as received. They will be sent, post-paid, for 50 cts. each. They cannot be sent by mail to Canada.

Lost Numbers.—We carefully mail the *BEE JOURNAL* to every subscriber, but should any be lost in the mails, we will replace them if notified before all the edition is exhausted.

Always State the Post-Office to which your paper is addressed, when writing to us.

Special Notices.

The Date on the wrapper-label of this paper indicates the end of the month to which you have paid for the *JOURNAL*. If that is past, please send us one dollar to pay for another year. This shows that Mr. Porter has paid his subscription up to the end of December, 1893:

Wallace Porter Dec93
Suffield, Portage co, Ohio

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, November 19th, 1892:

CHICAGO, ILL.—Demand for comb honey is quite good, and choice lots bring 18c., others in proportion. Extracted, 6@9c., according to what it is—sales chiefly at 8@9c.
Beeswax—23@25c. R. A. B.

CHICAGO, ILLS.—Good demand for fancy white comb, 18@19c.; No. 2, 15@16c.; No. 3, 13@14c. Buckwheat, 12@13c. Fancy white extracted, 9c.; amber, 7½@8c.; dark, 7c.
Beeswax—23@25c. J. A. L.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6.
Beeswax—20@23c. C-M. C. C.

CINCINNATI, OHIO.—Demand is good for honey, with scant supply of all kinds. Extracted brings 6@8c., and comb sells at 14@16c. for best white. Although honey is scarce, there is no demand for dark comb.

Beeswax—Demand good, at 20@25c. for good to choice yellow. Supply good. C. F. M. & S.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality. 1-lbs. Beeswax is neglected at 22@23c. S., L. & S.

BOSTON, MASS.—Market is a little slow, a car of California comb honey having arrived, and selling at 16@17c., and the Vermont selling slowly from 17@18c. Extracted, 8@9c.
Beeswax—27c. B. & R.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 6@7c. New crop is arriving and is very fine. No Beeswax on the market. H. & B.

MINNEAPOLIS, MINN.—Market good and new crop is arriving, but mostly dark is being marketed. Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13@14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

MINNEAPOLIS, MINN.—No. 1 white 1-lbs., 18c.; No. 2, 16@17c. No. 1 dark 1-lbs., 13@14c.; No. 2, 12½c. Old honey 2c. to 3c. per lb. lower. New extracted (not candied), white, 8@9c.; dark, 6@7c. Old extracted (candied) slow sale at 2 to 3c. lower per lb. S. & E.

NEW YORK, N. Y.—Comb is arriving freely, fancy white in good demand. Off grades and buckwheat slow selling. We quote: Fancy white 1-lbs. 15@17c.; 2-lbs. 12@14c. Fair white 1-lbs. 13@14c.; 2-lbs. 11@12c. Buckwheat 1-lbs. 10@11c.; 2-lbs. 9c. Extracted, clover and basswood, 8@8½c.; Southern, 70@75c. per gallon.

Beeswax—Dull at 25@27c. H. B. & S.

ALBANY, N. Y.—Honey market some quieter and prices some easier. White clover, 15@17c.; mixed, 14@15c.; dark, 10@11c. Extracted, white, 8@8½c.; mixed, 7@7½c.; dark 7c. Stocks light of both comb and extracted.
Beeswax, 27@28c. H. R. W.

Great Premium on page 685!

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

R. A. BURNETT, 161 South Water Street.
J. A. LAMON, 44 & 46 South Water Street

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN,
28 & 30 West Broadway.

San Francisco, Calif.

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

Minneapolis, Minn.

STEWART & ELLIOTT, 22 Bridge Square.
J. A. SHEA & CO., 14 & 16 Hennepin Avenue.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMONS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Your Neighbor Bee-Keeper

—have you asked *him* or *her* to subscribe for the BEE JOURNAL? Only \$1.00 will pay for it regularly to new subscribers from now to Jan. 1, 1894! And, besides, you can have Newman's book on "Bees and Honey" as a premium, for sending us two new subscribers. Don't neglect your neighbor! See page 685.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at 10 cents per line, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED.—We want a printing press, and will trade Dov. hives for same. Let us hear from you. LEVERING BROS.,
18Atf Wiota, Cass Co., Iowa.

TO EXCHANGE.—Pure Tested Young Italians, 3 to 5 bands, 50 cents to \$1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas

FOR SALE.—6 horse-power steam rig Boiler 26x60 in., 37 2-in. flues. Kriebel Engine 5x6 cylinder, 225 rev.—worth double what I ask. Price, \$130. V. W. KEENEY,
22Atf Shirland, Winnebago Co., Ills.

Convention Notices.

IOWA.—The Eastern Iowa Bee-Keepers' Association will meet at Maquoketa, Iowa, in the City Hall, on Dec. 14th and 15th, 1892. All are invited. FRANK COVERDALE, Sec. Welton, Iowa.

ILLINOIS.—The next annual meeting of the Rock River Bee-Keepers' Association will be held in Morrison, Ill., on Thursday, Dec. 1, 1892. J. M. BURTON, Sec. Morrison, Ills.

COLORADO.—The Colo. State Bee-Keepers' Association will hold their annual meeting in Denver, on Jan. 18 and 19, 1893. Election of officers and other important business will come before the meeting. Littleton, Colo. H. KNIGHT, Sec.

NEW YORK.—The next meeting of the Allegany County Bee-Keepers' Association will be held at Mrs. H. Green's, in Angelica, N. Y., at 2 p.m. on Monday, Nov. 28, 1892. All beekeepers are invited to attend. Friendship, N. Y. H. L. DWIGHT, Sec.

NORTH CAROLINA.—The Carolina Bee-Keepers' Association will hold its third annual session at the Court House in Charlotte, N. C., on Dec. 1, 1892. A full attendance is especially desired, and all those interested in bee-culture will have a hearty welcome. Steel Creek, N. C. A. L. BEACH, Sec.

MINNESOTA.—The annual meeting of the Minnesota Bee-Keepers' Association will be held at Minneapolis, on Thursday, Friday and Saturday, Jan. 12, 13 and 14, 1893. The Thursday meeting will probably be a union meeting with the Horticultural Society which meets at the same place, commencing on Tuesday. A. K. COOPER, Sec. Winona, Minn.

VERMONT.—The eighteenth annual meeting of the Vermont Bee-Keepers' Association will be held in the city of Burlington, Vt., on Dec. 28 and 29, 1892. Every one interested in apiculture is earnestly desired to be present. As a bee-keepers' association, we know no State lines, but will gladly welcome all that come. Programs will be published soon. Holiday rates on the railroads. Barre, Vt. H. W. SCOTT, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting at Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all beekeepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting. Boscobel, Wis. EDWIN PIKE, Pres.

THE NORTH AMERICAN Bee-Keepers' Association will hold its annual Convention in Washington, D. C., near the end of this year. The exact date cannot yet be given. Mr. Frank Benton is keeping close watch, and others are watching for him, to learn when some other Society will meet in Washington, so that the North American may meet in conjunction with it and thus secure reduced railroad rates. The Secretary is at work arranging a programme, and as soon as the exact date for holding the Convention can be given, the announcement will be made. Flint, Mich. W. Z. HUTCHINSON, Sec.

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the **BEE JOURNAL**. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

Read our great offers on page 685.

Advertisements.

\$80 A MONTH and expenses paid any active person to sell goods \$40 a month to distribute circulars, salary paid monthly. Sample of our goods and contract free. Send 10 cts. for postage, packing, etc. **WE MEAN BUSINESS.** UNION SUPPLY CO., CHICAGO, ILL.

Mention the American Bee Journal.

"A Year Among the Bees"

—BEING—

A talk about some of the Implements, Plans and Practices of a Bee Keeper of 25 years' experience, who has for 8 years made the Production of Honey his Exclusive Business.

By Dr. C. C. MILLER.

Its descriptions commence with the necessary work in the spring, and run through the entire Year, detailing the methods of doing, as well as telling when to do, all that should be done in the apiary. It contains 114 pages and is nicely bound in cloth.

Price, 50 cents, by Mail

Or we will Club it with the **BEE JOURNAL** for one year, for \$1.35.

GEORGE W. YORK & CO.,
199 Randolph St., - CHICAGO, ILLS.

\$7.50 FOR A DAYS' WORK.
GOOD PAY! STEADY WORK IF DESIRED. Address
JAMES LEE & CO., 215 Dearborn St., Chicago, Ill.

FAT FOLKS REDUCED From 15 to 25 lbs. per month by harmless herbal remedies that do not injure the health or interfere with one's business or pleasure. It builds up and improves the general health, clears the skin and beautifies the complexion. No wrinkles or flabbiness follow this treatment. Endorsed by physicians and leading society ladies. **PATIENTS TREATED BY MAIL. CONFIDENTIAL.** Harmless. No Starving. Send 5 cents in stamps for particulars to **DR. C. W. F. SAYER, M'VICKER'S THEATER, CHICAGO, ILL.**